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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/740,231	12/18/2000	Jacek F. Gieras	60,469-031	4502

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EXAMINER

ELKASSABGI, HEBA

ART UNIT PAPER NUMBER

2834

DATE MAILED: 07/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/740,231	GIERAS ET AL.	
	Examiner	Art Unit	
	Heba Elkassabgi	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19,22-23,26-29 is/are allowed.
- 6) ☐ Claim(s) 12 and 16 is/are rejected.
- 7) ☒ Claim(s) 10,11,13-15,17,18,20,21,24 and 25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. In regards to the rejection of claim 10 of the 35 USC § 112, second paragraph rejection is withdrawn in light of applicant's remarks of 04/26/2004 page 8. That the term relative is interpreted as follows:

"Applicant respectfully traverses the rejection under 35 U.S.C. 112 of claim 10. Relative rotary motion simply means that the stator and rotor can rotate relative to each other. In one example, the rotor will rotate relative to the stator. In another example, the stator will rotate relative to the rotor. In a third example, both could be rotating simultaneously".

2. In regards to the rejection of claim 19 of the 35 USC § 112, second paragraph rejection is withdrawn in light of applicant's remarks of 04/26/2004 page 8.

3. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The "closed ring" needs to be disclosed in a full, clear, and concise manner as to the closed ring being the yoke portions (62) or the pair of radially laminated stacks (60). For purpose of examination as understood by the examiner in the specification and drawings the closed ring will be interpreted to be the yoke portions.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claim 16 is rejected under 35 U.S.C. 102(b) as being anticipated by Lange (U.S. Patent 5289072).

Lange illustrates in Figure 1 a motor having a stator assembly (5) with first and second stator core portions (6a& 6b), which correspond to the end portions of the U shaped element (9, as denoted by the examiner in the attached figures of the previous office action). A coil (winding 8) is situated between the cores portions (6, 6a-6b) with at least part of an axial surface of the coil (winding 8) are covered by the core portions (6,6a-6b). The stator core portions (6,6a-6b) form a generally annular ring that have a plurality of circumferentially spaced projections that project radially inward from the ring. Alternatively, in figures #1 and #2 the first and second stator core portions each compris a U-shaped armature elements (9) (see column 2 lines 46-63, see Figure 2), in which a prewound coil (winding 8) nestingly supported between the core portions (9) with at least part of an axial surface of the coil (winding 8) covered by the core portions (9, see Figure 1). Additionally, a rotor (2) having a core (12) and a plurality of magnets (13), in which the stator and a rotor are supported in a relative rotary motion, and that the plurality of magnets (13) of the rotor (2) interacts with the stator core portions (6,6a-6b) during relative rotary motion.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- 1. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lange (U.S. Patent 5289072) and further in view of Weh (U.S. patent 5051641).**

Lange illustrates in Figure 1 a motor having a stator assembly (5) with first and second stator core portions (6a& 6b), which correspond to the end portions of the U shaped element (9, as denoted by the examiner in the attached figures of the previous office action). A coil (winding 8) is situated between the cores portions (6, 6a-6b) with at least part of an axial surface of the coil (winding 8) are covered by the core portions (6,6a-6b). The stator core portions (6,6a-6b) form a generally annular ring that have a plurality of circumferentially spaced projections that project radially inward from the ring. Alternatively, in figures #1 and #2 the first and second stator core portions each comprise a U-shaped armature elements (9) (see column 2 lines 46-63, see Figure 2), in which a prewound coil (winding 8) nestingly supported between the core portions (9) with at least part of an axial surface of the coil (winding 8) covered by the core portions (9, see Figure 1). Additionally, a rotor (2) having a core (12) and a plurality of magnets (13), in which the stator and a rotor are supported in a relative rotary motion, and that the plurality of magnets (13) of the rotor (2) interacts with the stator core portions (6,6a-6b) during relative rotary motion. However, does not disclose the support members.

Weh illustrates in Figure 4 a motor in which a plurality of magnetic stator core portions (El a and Elb) are radially enclosed on the outward axial surfaces of the core portions by two supported structures (casing ZGa and ZGb), in order to provide magnetization toward the axis of movement.

Since Lange and Weh are from the same filed of endeavor the purpose disclosed by the inventor would have been recognized in the pertinent art of the other.

It would have been obvious to one of ordinary skill in the art to combine the motor structure of Lange and that of the casing of Weh in order provide the axis of movement by way of magnetization.

Allowable Subject Matter

1. Claims 10-11,14-15,20-21,24-25 would be allowable if rewritten or amended to overcome the rejections under 35 U.S.C. 112, second paragraph, set forth in this Office action. For purpose of prosecution the examiner, as interpreted in light of page 7 lines 7-9 of the specification and figures 8 and 9 of the drawings, that the closed ring is the "yoke portions" as disclosed. Independent claim 10 is allowed over the prior art, which does not disclose the claimed structural combination of the two-stator portions, a yoke and coil.

2. Claim 13,17,18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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3. In regards to claim 13, prior art does not disclose a plurality of slots on the support members and wherein the magnetic core members are received in corresponding ones of the slots.

4. In regards to claim 17, the prior art does not disclose two support members with a plurality of radially inwardly projecting spacer portions and the stator core portion projections and the spacer portions interposed outward the axial surfaces on the core projections are not covered by the support members.

5. In regards to claim 18, the prior art does not disclose a plurality of slots in the support members and at least one magnetic core member is inserted into each of at least some of the slots.

6. The following is an examiner's statement of reasons for allowance:

A. Claim 19, is allowed over the prior art which does not disclose a bonding agent on the stator that bonds the stator core portions together in combination with a stator having a first and second core portions and a coil nestingly supported between the core portions and the coil covered by the core portions.

B. Claim 22 is allowed over the prior art, which does not disclose two supported members with a plurality of radially inwardly projecting spacer portions, and the stator core portions projections and the spacer portions being interposed such that outward axial surfaces on the core projections are not covered by the supported members.

C. Claims 26-29 are allowed over the prior art, which does not disclose two stator core portions being each an annular ring and having extending projections from the core portions. In combination with an annular coil that is received between the projections of the first and second stator core portions so that the stator rings are circumferentially coextensive with the coil.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

2. Applicant's arguments with respect to claims 10-29 have been considered but are moot in view of the new grounds of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heba Elkassabgi whose telephone number is (571) 272-2023. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Heba Elkassabgi



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